

## **REMARKS**

Claims 1-2, 5, 7-8, 10-29, 32-34, 36, 38, and 45-52 are pending. Claim 12 has been amended to recite “a valve mechanism which maintains the outlet orifice in a closed state when the metering chamber is between the first and second volumetric states.” Support for this amendment can be found throughout the specification, for example in Figures 1-5 and the accompanying description thereto.

Applicant responds to each of the Action’s rejections in the order in which they are presented in the Action.

### **I. Double Patenting Rejection Overcome**

Claims 1-2, 5, 7-8, 10-29, 32-34, 36, 38, and 45-52 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18, 20-31, and 35-44 of copending Application No. 10/522,996. As this is a provisional rejection, applicant respectfully traverses this rejection by electing not to respond to the rejection at this time.

### **II. Section 102 / 103 Rejections Overcome**

A. Claims 1-2, 5, 7-8, 10-29, 32-34, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over German Patent No. DE 100 17 438 (Katz). Applicant respectfully traverses this rejection.

As articulated by the MPEP 706.02 (emphasis added):

***“for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly.”***

Claim 1 recites, in pertinent part, (emphasis added):

“... a first volumetric state, in which the metering chamber has a first volume greater than the metered volume and is in fluid communication with the storage chamber such that, in use, an excess volume of the fluid product consisting of the metered volume and a surplus volume is transferable to the metering chamber from the storage chamber, and  
a second volumetric state, in which the metering chamber has a second volume less than the first volume and no less than the metered volume and is isolated from the storage chamber such that, in use, *the metered volume* of the fluid product is contained in the metering chamber *ready for dispensing* through the outlet orifice; and  
... further movable from the second volumetric state to a third volumetric state which has a volume less than the second volume, movement of the metering chamber from the second to third volumetric states *causing dispensing of the metered volume* through the outlet orifice;...”.

Katz fails to teach a number of elements recited in claim 1 and provides no motivation as to how to arrive at such elements. For example, Katz does not teach or suggest a device having a second volumetric state in which the metered volume of the fluid product is contained in the metering chamber ready for dispensing through the outlet orifice, and a third volumetric state wherein movement of the metering chamber from the second to third volumetric states causes dispensing of the metered volume through the outlet orifice as recited in claim 1.

In contrast, Katz proposes a cream dispenser in which “a path of the plunger which serves to dispense portions of product is limited by the front face at the end of the plunger hitting a front wall” and in which “the starting position is delineated by a limit stop” (see Katz, page 3 lines 14-16 and 18, respectively). Thus, Katz proposes a cream dispenser with two distinct positions, filling and dispensing. The Action seems to suggest, however, that, while Katz does not explicitly disclose three volumetric states as recited in claim 1, there is nothing to prohibit one from operating the Katz device to achieve the three volumetric states recited in claim 1. Thus, the Action seems to suggest that one could move the plunger in Katz from “the starting position [which] is delineated by a limit stop” to a second, intermediate position, wherein the plunger is moved past channel 22 to isolate container 2, thereby achieving, at least according to the Action, the claimed second volumetric state. According to the Action, one could then push the

plunger until the front face hits the front wall, thereby achieving, at least according to the Action, the claimed third volumetric state.

The Action's interpretation of Katz fails to give meaning to each and every recitation of claim 1, however. As noted above, claim 1 recites a second volumetric state in which the metered volume of the fluid product is contained in the metering chamber **ready for dispensing** through the outlet orifice, and movement from the second to the third volumetric states causes dispensing of the metered volume. If one were to operate the device of Katz in order to obtain three volumetric states as proposed by the Action, the device of Katz would not meet all of the recitations of claim 1. Katz does not disclose or suggest that the outlet valve (13 in Figure 1) would prevent cream from being dispensed from the device when moving from the first volumetric state to the Action's alleged "second volumetric state" of Katz. However, as recited in claim 1, the second volumetric state is one in which the metered volume of the fluid product is contained in the metering chamber **ready for dispensing**, which is to say that the metered volume has not yet been dispensed. As recited in claim 1, the dispensing of the metered volume does not occur until the device is moved from the second volumetric state to the third volumetric state. In sharp contrast, the Katz device, even if operated as suggested in the Action to achieve three volumetric states, would dispense cream when moving from the first volumetric state to the second volumetric state, resulting in the second volumetric state **not** being a state in which the metered volume of the fluid product is contained in the metering chamber **ready for dispensing**, as recited in claim 1.

For at least the foregoing reasons, Applicant respectfully submits that claim 1 is patentable over Katz and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-29, 32-34, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action's rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

B. Claims 1-2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 7,008,433 (Voellmicke *et al.*). Applicant respectfully traverses this rejection.

In contrast to the recitations of claim 1 described above in section A, Voellmicke proposes a bone cement dispenser, “in more preferred embodiment, the stroke of the plunger is such that piston 33 of the plunger begins its stroke at position A, and then moves across the entry opening 25 during the injection stroke to B<sub>2</sub>” (see Voellmicke, columns 7-8 lines 67 and 1-5, respectively). Accordingly, Voellmicke only has 2 positions. As described above in Section A of this response, the device recited in claim 1 has three volumetric states, which is clearly not taught or suggested by Voellmicke.

For at least these reasons and reasons similar to those presented above in Section A, Applicant respectfully submits that claim 1 is patentable over Voellmicke *et al.* and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action’s rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

C. Claims 1-2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,077,494 (Spaude *et al.*). Applicant respectfully traverses this rejection.

For at least reasons similar to those presented above in Section A, Applicant respectfully submits that claim 1 is patentable over Spaude *et al.* and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action's rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

D. Claims 1-2, 5, 7-8, 10-15, 18-29, 32-34, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,435,647 (Engseth). Applicant respectfully traverses this rejection.

For at least reasons similar to those presented above in Section A, Applicant respectfully submits that claim 1 is patentable over Engseth and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-34, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action's rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

E. Claims 1-2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,497,762 (Davis). Applicant respectfully traverses this rejection.

For at least reasons similar to those presented above in Section A, Applicant respectfully submits that claim 1 is patentable over Davis and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action's rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

### **III. Conclusion**

All claim rejections being addressed in full, Applicant respectfully requests the withdrawal of the outstanding objections and rejections and the issuance of a Notice of Allowance. Should the Examiner have any questions regarding the foregoing, Applicant respectfully requests that the Examiner contact the undersigned, who can be reached at (919) 483-9024.

Respectfully submitted,

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